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AUTHOR Van Tilburg, Emmalou
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ABSTRACT

A study examined the relationship between reward contingencies and the levels of job performance and job satisfaction of Cooperative Extension Service county agents. Variables included self-rating of job performance; overall job satisfaction; satisfaction with pay, promotion, co-workers, the work itself, and supervision; agent program area; the perceived performance-intrinsic reward contingency; and the perceived performance-extrinsic reward contingency. Particular attention was paid to the role that perceived extrinsic rewards played in the job performance-job satisfaction relationship. The study population (N=244) consisted of all Ohio Cooperative Extension Service county agents and included 94 agriculture agents, 80 home economics agents, and 70 4-H youth agents. The agents reported a moderate amount of overall job satisfaction. Many were not satisfied with promotion opportunities. Only 20 percent scored in the high range with respect to satisfaction with pay and 10 percent scored in the low range. The facet of work found to be most satsifying was that of relationships with co-workers. Agents tended to reward themselves intrinsically for good performance, with 97 percent agreeing with the intrinsic reward contingency. Forty-two percent of the respondents disagreed, however, with the notion that the organization had a performance-contingent reward system (reflected by a 3.65 score on the extrinsic reward contingency, which was the lowest score in the study). (MN)

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PERFORMANCE-REWARD CONTINGENCIES: THE ROLE AND RELATIONSHIPS OF PERCEIVED EQUITY IN THE JOB PERFORMANCE-JOB SATISFACTION QUESTION

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Dr. Emmalou Van Tilburg
Assistant Professor
Department of Agricultural Education
and
Leader, Evaluation
The Ohio Cooperative Extension Service
The Ohio State University

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INTRODUCTION

The success of the Cooperative Extension Service as a leading adult educational organization comes from involvement of field faculty working face-to-face with clientele at each step of the learning process (Lawrence, 1974). This is best accomplished when the staff offering leadership to community residents includes high-level performers who are well-trained and maintained, a condition which should produce a consistent and continuous pattern of leadership.

In Extension, because of the importance and complexity of the field faculty positions, the assurance of satisfaction of individuals comes through personnel development activities and an appropriate, equitable reward system. The better that the Extension Service administration can perform these management tasks, the more continuity Extension programming should possess (Smith, 1985).

Employee satisfaction has long been a major concern of organizations like the Extension Service, which have the bulk of the production system concentrated in local staff (Cunningham, 1986). Turnover and absenteeism are two major consequences of dissatisfaction among employees and both have proven disruptive to the continuity and quality of Extension programming (Clark, 1981; Van Tilburg, 1986). When high level performers are being affected, the negative results of dissatisfaction are even more pronounced within the organization.

Thus, administrators of labor-intensive organizations like Extension would benefit from a better understanding of the relationship between job performance and job satisfaction. Increased knowledge of the individual processes involved in employee performance and satisfaction would be an important step in the management of absenteeism, turnover and other detrimental behaviors associated with organizational productivity and ultimate success.

Job Performance and Job Satisfaction

Most of the research which has investigated the job performance-job satisfaction relationship has shown only a slight positive relationship between the two (Fisher, 1980). The original hypothesis explored suggested a positive relationship between satisfaction and performance with satisfaction affecting performance (Brayfield & Crockett, 1955). Later research reversed the hypothesized causality and suggested that performance led to satisfaction, but still major literature reviews reported that the relationships found were very slight or non-existent (Lawler, 1973; Steers & Porter, 1983).

One study (Cherrington, Reitz, & Scott, 1971), based on a model of satisfaction presented by Lawler and Porter (1967), found that an important

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consideration when proposing a relationship between performance and satisfaction was the existence of a performance-contingent reward system. The model appearing in Figure 1 implied that only under performance-contingent reward systems would employee performance be positively related to satisfaction. This model suggested that high performance would lead to high satisfaction if employees perceived that there was an equitable reward system within the organization. This condition has been referred to as a perceived performance-extrinsic reward contingency.

Also included in the Lawler model was an intrinsic reward contingency ("I reward myself when I perform well."). It follows that the performance-satisfaction relationship would also be moderated by this variable. To address adequately the role of the performance-reward contingency in the performance-satisfaction relationship, both types of rewards must be considered (Figure 2).

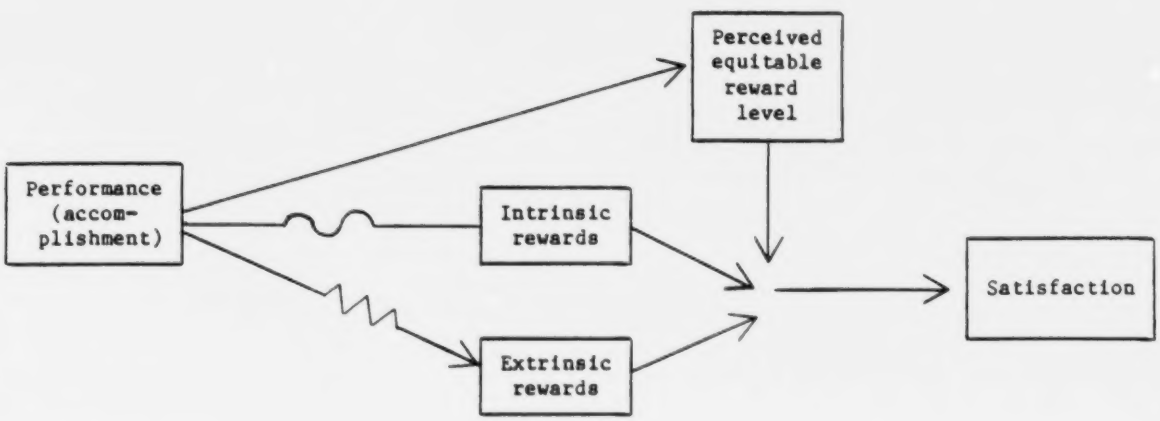

Figure 1.

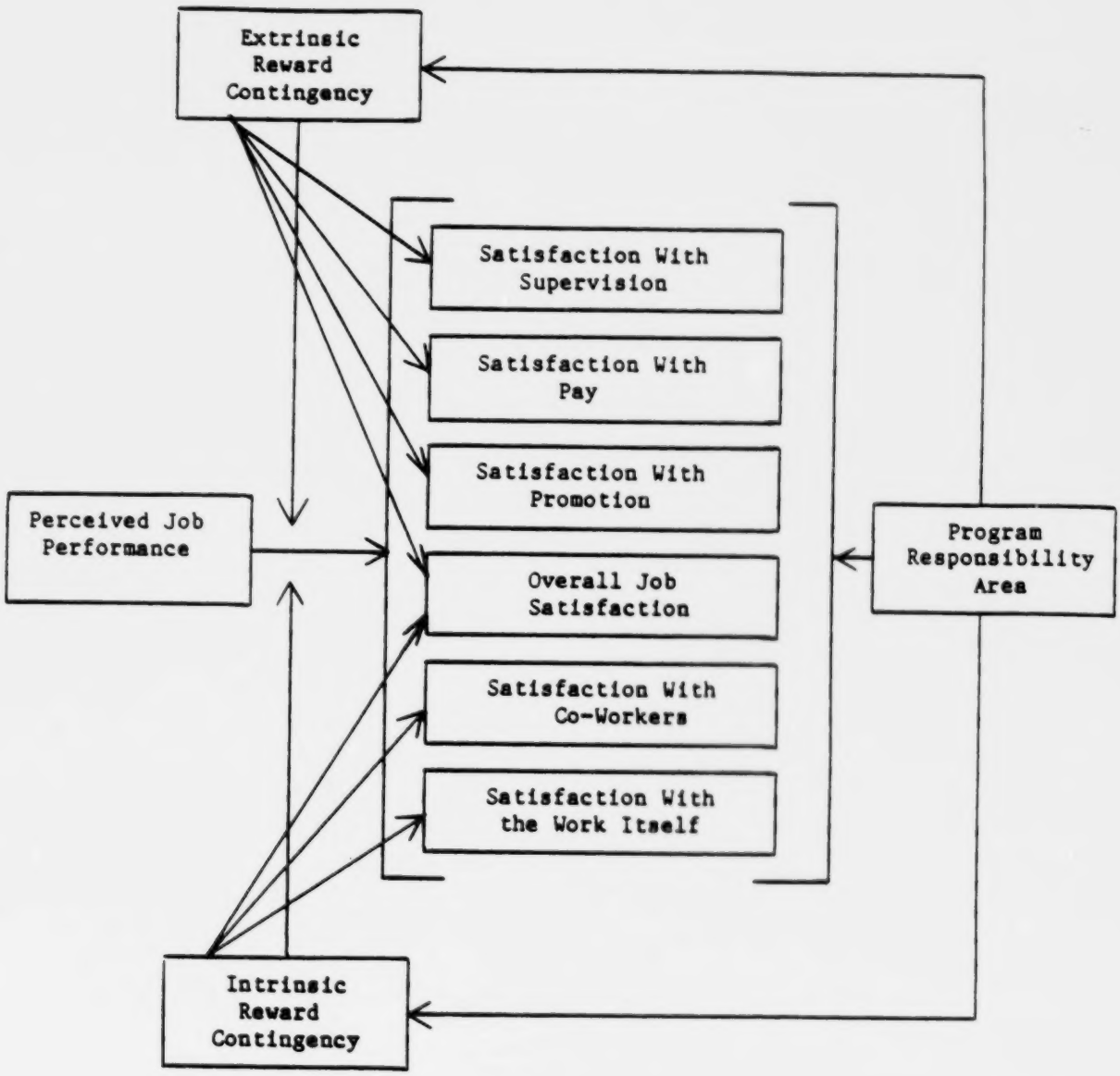

Figure 2. Model suggesting relationships among variables

Purpose and Objectives

The purpose of the study was to investigate the relationship between reward contingencies and the levels of job performance and job satisfaction of Cooperative Extension Service County agents. Of particular interest was the role that perceived extrinsic rewards played in the job performance-job satisfaction relationship.

The objectives of this study were to:

1. describe the population on each of the following variables: self-rating of job performance, overall job satisfaction, satisfaction with the pay, satisfaction with promotion, satisfaction with co-workers, satisfaction with the work itself, satisfaction with supervision, agent program area, perceived performance-intrinsic reward contingency, and perceived performance-extrinsic reward contingency;

2. determine relationships among selected variables;

3. determine if there were moderating effects of certain selected variables on the relationship between other selected variables; and

4. determine if there were differences between groups on selected variables.

The following hypotheses were developed to address objectives two, three, and four:

1. Satisfaction with pay, satisfaction with promotion, and satisfaction with supervision will be positively related to the perceived job performance-extrinsic reward contingency.

2. Satisfaction with co-workers and satisfaction with the work itself will be positively related to the perceived job performance-intrinsic reward contingency.

3. Overall job satisfaction will be positively related to both of the perceived job performance-reward contingency variables.

4. The perceived job performance-extrinsic reward contingency will moderate the relationships between job performance and all job satisfaction variables in the following way:

   high performance will lead to high satisfaction and low performance will led to low satisfaction only when there is a high perceived performance-extrinsic reward contingency. No relationship is expected between performance and satisfaction when there is a low performance-extrinsic reward contingency.

5. The perceived job performance-intrinsic reward contingency will moderate the relationships between job performance and all job satisfaction variables in the following way:

high performance will lead to high satisfaction and low performance will lead to low satisfaction only when there is a high perceived performance-intrinsic reward contingency. No relationship is expected between performance and satisfaction when there is a low performance-intrinsic reward contingency.

6. There is a relationship between program responsibility area and job satisfaction variables.

7. There is a relationship between program responsibility are and both perceived job performance-reward contingency variables.

Procedures

The design of the study was correlational in nature, allowing the researcher to investigate relationships among variables.

Population

The population consisted of all Ohio Cooperative Extension Service County agents under contract March 1, 1985. Names were obtained from a validated list secured from the Ohio Cooperative Extension Service. The validation process controlled for selection and frame error. The population (N=244) included agriculture agents (N=94), home economics agents (N=80), and 4-H youth agents (N=70).

The entire population was used in the study (controlling sampling error) and was referred to as a sample of all populations of Ohio Cooperative Extension Service county agents who might have been employed by the Ohio Cooperative Extension Service at other points in time. This logic permitted the use of inferential statistics in the data analysis.

Data Collection

The data were collected during the month of May, 1985 using a mail questionnaire. Following suggestions by Dillman (1978), a follow-up procedure was used to obtain an acceptable response rate. The total number of respondents for the mail questionnaire was 229 (accepting sample = 94 percent). Data for 218 agents were usable (data sample = 89 percent). Generalizability of the results of the study was determined by comparing early respondents with late respondents on all variables using t-tests (Alpha=.05). No differences were found; thus, using the logic that late respondents are most like non-respondents (Miller & Smith, 1983), results were generalized to the entire population.

Instrumentation

The mail questionnaire contained three parts: (1) Likert-type items scaled very strongly disagree = 1 to very strongly agree = 6, (2) demographic items, and (3) the Job Descriptive Index (Smith, Kendall, & Hulin, 1969) which measures facets of job satisfaction. Content validity was determined using a panel of experts. Reliability of Likert-type items was determined using a pilot test of Ohio Cooperative Extension Service district personnel producing Cronbach's alphas ranging from .70 to .95. Cronbach's alphas obtained from the data sample ranged from .77 to .91.

Data Analysis

Descriptive statistics (frequencies, percentages, measures of central tendency, and variability) were used to organize and summarize the data. Correlational and regression techniques (multiple regression, moderated regression as recommended by Pedhazur (1982), and Pearson correlation coefficients) were used to determine the nature and strength of relationships and moderating effects of variables on relationships between other variables. Analysis of variance and t-tests were used to compare groups on selected variables. Alpha levels were set a priori at .05.

Results

Results are organized by objectives. The following scales and interpretations were used:

1. Satisfaction with pay and promotion were measured using a scale of zero to 27 with zero representing the absence of satisfaction.

2. Satisfaction with supervision, co-workers, and the work itself were measured using a scale of zero to 54 with zero representing the absence of satisfaction.

3. Perceived job performance-reward contingency variables, overall job satisfaction, and job performance were measured using a six point Likert-type scale interpreted in the following manner: scores of 1.00 to 3.50 will indicate disagreement, scores of 3.51 to 6.00 will indicate agreement.

Objective One: Describe the population on the independent and dependent variables

Data for objective one appear in Table 1. Agents reported a moderate amount of overall job satisfaction ($\bar{x}$=4.42) but had varying amounts associated with specific components of the job depending on the particular facet being measured.

Findings suggested that many agents were not satisfied with promotion opportunities. Even though the average score (10.96) fell in the medium range of satisfaction, over 37 percent of all agents reported low scores for promotion.

Similar to those findings were the results of satisfaction with pay with the mean score 15.26. Only 20 percent, however, scored in the high range and ten percent were in the low range.

Agents scored medium to high on the facet, the work itself. The average score was 39.95 out of 54. Most agents were even more satisfied with their supervision with sixty percent in the high range ($\bar{x}$=41.46).

The facet of the job that respondents were most satisfied with was their relationships with co-workers. The mean score was 44.37.

Agents tended to reward themselves intrinsically for good performance with 97 percent of the agents in agreement with the intrinsic reward contingency ($\bar{x}$=4.73). Forty-two percent of the respondents disagreed, however, that the

Table 1

Means and standard deviations of variables

Variable	Mean	Standard Deviation	Scale
Self-rating of Job Performance	4.73	.406	1 to 6
Extrinsic Reward Contingency	3.65	.733	1 to 6
Intrinsic Reward Contingency	4.73	.674	1 to 6
Overall Job Satisfaction	4.42	.764	1 to 6
Satisfaction with Promotion	10.96	7.18	0 to 27
Satisfaction with Pay	15.26	5.40	0 to 27
Satisfaction with the Work Itself	39.95	5.70	0 to 54
Satisfaction with Co-Workers	44.37	9.94	0 to 54
Satisfaction with Supervision	41.46	10.72	0 to 54

organization had a performance-contingent reward system with the mean score of 3.65 on the extrinsic reward contingency being the lowest in the study.

Agents rated themselves as moderately high performers with all agents but one scoring above 3.50 ($\bar{x}$=4.73). Program areas were evenly represented in the study: Agriculture = 38%, Home Economics = 33%, and 4-H Youth = 29%.

Objective Two: Determine relationships between variables

To aid in description of relationships, the interpretation suggested by Davis (1971) was used. Data for objective two appear in Table 2. Results supported hypothesis one. Substantial positive relationships were found between satisfaction with pay and satisfaction with promotion and with the extrinsic reward contingency (r=.54, r=.52, respectively). A moderate positive relationship was found between satisfaction with supervision and the extrinsic reward contingency (r=.48).

Results for hypothesis two were mixed. No relationship was found between satisfaction with co-workers and the intrinsic reward contingency (r=.04) but a moderate positive relationship between the work itself and the intrinsic reward contingency was indicated by the .30 correlation coefficient.

Hypothesis three was supported with results indicating that overall job satisfaction is positively related to both contingency variables. The relationship was moderate for the extrinsic reward contingency (r=.36) and substantial for the intrinsic reward contingency (r=.50).

Objective Three: Determine moderating effects

Hypotheses four and five suggested that the reward contingency variables would moderate any relationship found between job performance and job satisfaction. A moderated regression technique (use of interaction variables in regression models) was used to determine moderating effects. Data for these hypotheses appear in tables three and four.

Table 2

Pearson correlation coefficient for the relationships between variables

	Perceived Job Performance	Overall Job Satisfaction	Satisfaction with					Extrinsic Reward Contingency	Intrinsic Reward Contingency
			Pay	Promotion	Work Itself	Co-Workers	Supervision		
Perceived Job Performance	1.00								
Overall Job Satisfaction	.26	1.00							
Satisfaction with Pay	-.11	.33	1.00						
Satisfaction with Promotion	-.09	.22	.28	1.00					
Satisfaction with Work Itself	.10	.50	.26	.25	1.00				
Satisfaction with Supervision	-.05	.24	.27	.35	.26	2.8	1.00		
Extrinsic Reward Contingency	.04	.36	.54	.52	.36	.36	.48	1.00	
Intrinsic Reward Contingency	.35	.50	.05	.04	.30	.04	.14	.11	1.00

The job performance-extrinsic reward contingency was not found to be a moderating variable but instead was determined to have a direct effect on satisfaction as indicated by significant variance increments for the contingency variable in all regression models. The hypothesized and actual relationships are pictured in Figure 3.

The only significant interaction (indicating the moderation of a relationship) found was associated with satisfaction with promotion but the moderating variable appeared to be job performance rather than the contingency variable. (The change in R2 of .04, though statistically significant was small enough to question the practical significance of the findings.) The interaction was ordinal and indicated that high performers' satisfaction with promotion increased as perceptions of equity of the reward system increased but at a slower rate than the increase associated with low performers.

The intrinsic reward contingency was also not found to moderate the relationship between performance and satisfaction. The only significant interaction (associated with satisfaction with supervision) was again an

Table 3

Results of moderated regression of the interaction of job performance-extrinsic reward contingency and self-rating of job performance in the prediction of desirability of staying variables

Dependent Variable	Self-rating of job performance: Change in R^2	df	F	Performance-Extrinsic Reward: Change in R^2	df	F	Interaction: Change in R^2	df	F
Overall job satisfaction	.060	(1,215)	*16.10	.119	(1,215)	*31.43	.002	(1,214)	.48
Satisfaction with promotion	.012	(1,215)	3.55	.277	(1,215)	*83.03	.040	(1,214)	*12.67
Satisfaction with pay	.018	(1,215)	*5.37	.288	(1,215)	*93.26	.003	(1,214)	1.00
Satisfaction with the work itself	.008	(1,215)	1.99	.123	(1,215)	*30.58	.000	(1,214)	.06
Satisfaction with co-workers	.001	(1,215)	.12	.127	(1,215)	*31.22	.001	(1,214)	.12
Satisfaction with supervision	.005	(1,215)	1.36	.234	(1,215)	*66.00	.000	(1,214)	.08

*p <.05, F_{crit} 3.89

indication that job performance moderated the relationship between the contingency variable and satisfaction and not the reverse. (The change in R2 was .02, and again the magnitude suggests the question of practical significance.) This interaction was disordinal and suggested that if agents were high performers, their satisfaction with supervision would increase as their perceptions of the intrinsic contigency increased but if they were low performers, the opposite relationship was true.

Objective Four: Determine differences among groups

Hypotheses six and seven addressed objective four; Analysis of Variance was used to test the differences among the three program responsibility areas on the six job satisfaction measures and the two reward contingency variables.

4-H youth agents scored significantly lower (alpha = .05) than both Agricultural and Home Economics agents on three measures of satisfaction (overall satisfaction, satisfaction with pay, and satisfaction with the work itself) as well as the extrinsic reward contingency (Table 5). In fact, 4-H youth agents scored lowest on all measures of satisfaction and both contingency variables.

Table 4

Results of moderated regression of the interaction of job performance-intrinsic reward contingency and self-rating of job performance in the prediction of desirability of staying variables

Dependent Variable	Self-rating of job performance: Change in R^2	df	F	Performance-Intrinsic Reward: Change in R^2	df	F	Interaction: Change in R^2	df	F
Overall job satisfaction	.008	(1,215)	2.32	.192	(1,215)	*55.66	.007	(1,214)	2.04
Satisfaction with promotion	.012	(1,215)	2.58	.006	(1,215)	1.34	.008	(1,214)	1.85
Satisfaction with pay	.018	(1,215)	3.86	.008	(1,215)	1.72	.004	(1,214)	.85
Satisfaction with the work itself	.000	(1,215)	0.00	.070	(1,215)	*18.26	.006	(1,214)	1.42
Satisfaction with co-workers	.001	(1,215)	.13	.001	(1,215)	.17	.010	(1,214)	2.13
Satisfaction with supervision	.011	(1,215)	2.44	.028	(1,215)	*6.26	.020	(1,214)	*4.62

*p <.05, F_{crit} 3.89

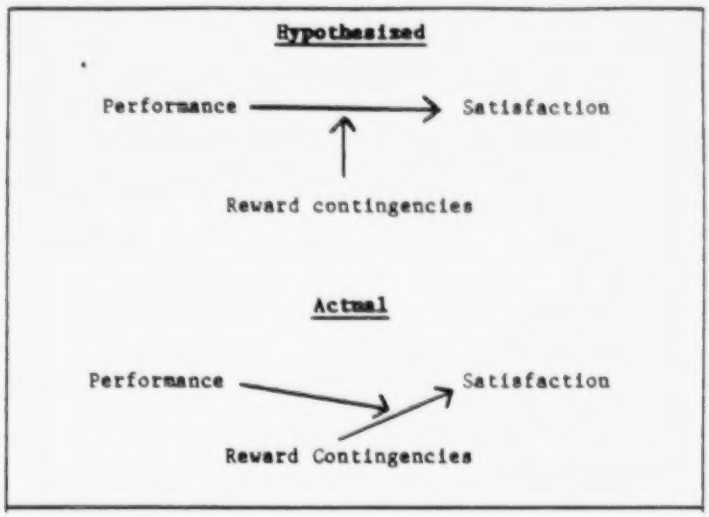

Figure 3. Hypothesized and actual relationships between performance, reward contingencies and satisfaction

Table 5

Means, standard deviations, and analysis of variance of mean perceived job performance-extrinsic reward contingency, overall job satisfaction, satisfaction with pay, and satisfaction with the work itself by major program responsibility area

	Agriculture (N=84)		Home Economics (N=71)		4-H Youth (N=63)
Perceived Job Performance-Reward Contingency					
Mean Score	3.723		3.740		3.452
Standard deviation	.628		.808		.745
Source	df	SS	MS	F*	p
Between groups	2	3.4948	1.7474	3.3233	.0379
Within groups	215	113.0461	.5258		
Total	217	116.5408			
Overall Job Satisfaction					
Mean Score	4.560		4.507		4.142
Standard deviation	.749		.633		.850
Source	df	SS	MS	F*	p
Between groups	2	7.0400	3.5200	6.3286	.0021
Within groups	215	119.5842	.5562		
Total	217	126.6242			
Satisfaction with Pay					
Mean Score	15.964		15.760		13.777
Standard deviation	5.351		5.233		5.452
Source	df	SS	MS	F*	p
Between groups	2	197.8575	98.9287	3.4660	.0330
Within groups	215	6136.7113	28.5428		
Total	217	6334.5688			

Conclusions and Recommendations

1. High satisfaction with intrinsic components of the job (co-workers and the work itself) and lower satisfaction with extrinsic components (pay, promotion, supervision) as well as low scores on the extrinsic reward contingency and high scores on the intrinsic reward contingency indicate that agents tend to reward themselves for high performance while they perceive that the organization does not. The Extension Service should investigate the actual reward contingencies in place to determine equity of the reward system. In addition, importance must be placed on administrative awareness of perceptions and attitudes of employees.

2. The high correlations between the contingency variables and measures of satisfaction indicate that organizations concerned with satisfaction levels among employees should pay particular attention to perceptions of equity of the reward system. The lack of significant interactions between performance and perceived equity indicate that, generally, if the condition exists (perceived equity or inequity), it exists regardless of performance level.

3. Although Agricultural and Home Economics agents tended to agree on most measures, 4-H youth agents scored lower than the other two groups on all variables and significantly lower on some variables. Specific steps should be taken to investigate reasons for the discrepancy and a developmental plan should be established to begin to address some of the issues involved.

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